

Claims

What is claimed is:

1. A method of modifying firmware in a first disk drive of a RAID storage system, comprising:
 - copying data from the first disk drive to a second disk drive;
 - redirecting requests to access the first disk drive to the second disk drive in response to copying the data; and
 - changing firmware presently within the first disk drive in response to redirecting the requests.
2. The method of claim 1, further comprising disabling the first disk drive from processing the requests while changing the firmware.
3. The method of claim 2, further comprising enabling the first disk drive in response to changing the firmware.
4. The method of claim 3, further comprising stopping the redirecting of the requests to the second disk drive in response to enabling.
5. The method of claim 3, further comprising copying data from the second disk drive to the first disk drive in response to enabling the first disk drive.
6. The method of claim 1, further comprising logging the redirected requests to access the first disk drive.
7. The method of claim 6, wherein the logged requests are stored with the second disk drive.
8. The method of claim 6, further comprising processing the logged requests to the first disk drive in response to changing the firmware.
9. A RAID storage system, comprising:
 - a first disk drive designated for firmware modification;

a proxy disk drive; and

a storage controller coupled to the first disk drive and to the proxy disk drive and configured for copying data from the first disk drive to the proxy disk drive, for redirecting requests of the first disk drive to the proxy disk drive, and for changing firmware presently within the first disk drive.

10. The system of claim 9, further comprising a request log, wherein the storage controller is further configured to log redirected write requests in the request log.

11. The system of claim 10, wherein the request log is stored in the proxy disk drive.

12. A system for modifying firmware in a first disk drive of a RAID storage system, comprising:

means for copying data from the first disk drive to a second disk drive;

means for redirecting requests to access the first disk drive to the second disk drive responsive to the means for copying the data; and

means for changing firmware presently within the first disk drive responsive to the means for redirecting the requests.

13. The system for modifying of claim 12, further comprising means for disabling the first disk drive from processing the requests while changing the firmware.

14. The system for modifying of claim 13, further comprising means for enabling the first disk drive responsive to the means for changing the firmware.

15. The system for modifying of claim 14, further comprising means for stopping the redirecting of the requests to the second disk drive responsive to the means for enabling.

16. The system for modifying of claim 14, further comprising means for copying data from the second disk drive to the first disk drive responsive to the means for enabling the first disk drive.

17. The system for modifying of claim 12, further comprising means for logging the redirected requests to access the first disk drive.

18. The system for modifying of claim 17, wherein the logged requests are stored with the second disk drive.

19. The system for modifying of claim 17, further comprising means for processing the logged requests to the first disk drive responsive to the means for changing the firmware.